

A new species and a new record for *Astrotricha* DC. (Araliaceae) in Queensland

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Summary

Bean, A.R. (1995). A new species and a new record for *Astrotricha* DC. (Araliaceae) in Queensland. *Austrobaileya* 4(3): 407–409. *Astrotricha pauciflora* A.R.Bean, a new species from Mount Barney National Park is described, illustrated and compared to related species. *Astrotricha roddii* Makinson is newly recorded for Queensland.

Keywords: *Astrotricha*-Queensland, *Astrotricha pauciflora*, *Astrotricha roddii*, Araliaceae.

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Introduction

Recent taxonomic research on *Astrotricha* (Bean 1991; Makinson 1991) has resulted in the naming of several new species in eastern Australia.

The species named here as *A. pauciflora* was discovered by C.T. White in 1931 and identified by him as *A. biddulphiana* F.Muell., a reasonable course of action in view of the paucity of fertile material available to him. Recent collections representing a wide range of material have shown that this taxon is distinct from *A. biddulphiana* in several features, as outlined below. Continuing botanical exploration of Queensland has uncovered a population of *A. roddii*, hitherto known only from New South Wales, as detailed below.

Taxonomy

***Astrotricha pauciflora* A.R.Bean sp. nov.**
affinis *A. biddulphiana* F.Muell. sed inflorescentia multo brevior, umbellarum floribus paucioribus parvioribus et fructibus viridibus differt. **Typus:** Queensland. MORETON REGION: North Ridge, Mt Barney National Park, 16 July 1994, A.R. Bean 7734 & D.A. Halford (holo: BRI; iso: CANB,K,MEL,NSW).

A bushy, well-branched shrub, to 90 cm high. Bark smooth, lenticels conspicuous. Stems,

petioles and abaxial surfaces of leaves stellate-pubescent, with individual hairs c. 0.25 mm across. Leaves alternate, linear, 35–60 × 2.2–3.5 mm, acuminate, dark green adaxially, pale yellow to brownish abaxially, midrib impressed adaxially, raised abaxially; petioles terete, 3–4 mm long. Panicles terminal, 3–9 cm long, glabrous, purple in colour; bracts linear, 1.5–2.5 mm long, with a few stellate hairs. Unit inflorescence umbellate, 2–4(–5)-flowered; peduncles and pedicels slender, pedicels 5–8 mm long. Flowers bisexual, protandrous, 4–4.5 mm across. Hypanthium glabrous, 1.5–2.0 mm long at anthesis, campanulate; calyx teeth deltoid, apex acute or obtuse, c. 0.5 × 0.5 mm. Petals 5, deltoid, 1.4–1.6 × 1.0–1.2 mm, purple, acuminate, caducous; stamens 5, purple, alternating with the petals; filaments terete, c. 1.5 mm long; anthers white, c. 1.3 mm long, versatile, dorsifixed, opening by longitudinal slits. Styles 2, 1.8–2 mm long; at first erect, later spreading from base. Fruit a schizocarp, glabrous, elliptical in transverse section, 6–9.5 mm long, 3–4 mm wide, 2–3 mm thick; 2-locular, splitting at maturity; obovoid except for basal 1–3 mm which is narrow, cylindrical; green except for persistent calyx teeth and styles. **Fig. 1.**

Additional specimens examined: Queensland. MORETON DISTRICT: Mount Barney, Aug 1931, White 7827 (BRI); northern slopes of Mt Maroon, May 1990, Bean 1602, Forster & Bird (AD,BRI,CANB,K,MEL,NSW); South ridge, Mt Barney, Sep 1994, Bean 7856 & Forster (BRI,MEL).

Distribution and habitat: *A. pauciflora* is apparently confined to Mt Barney and Mt Maroon in Queensland, both close to the Queensland–New South Wales border. It grows in rocky crevices in low eucalypt woodland or heathland, at altitudes above 600 metres. The estimated annual rainfall there is 1500 mm.

Flowering period: Flowers have been collected in May, July and August.

Affinites: *A. pauciflora* is closely related to *A. biddulphiana* F. Muell. but it differs from

that in its leaves 2.2–3.5 mm wide (3.5–7 mm for *A. biddulphiana*), petioles 3–4 mm long (4–6 mm long), inflorescences only 3–9 cm long (16–30 cm long), pedicels 5–8 mm long (8–13 mm long), 2–4(5) flowers per umbel (4–8(11) flowers), petals 1.4–1.6 mm long (2.0–2.2 mm long) and green fruits (purple). In *A. pauciflora*, the base of the fruit tapers gradually into the pedicel, whereas in *A. biddulphiana*, it contracts abruptly into the pedicel.

A. biddulphiana has a broad, but highly disjunct distribution in southern Queensland.

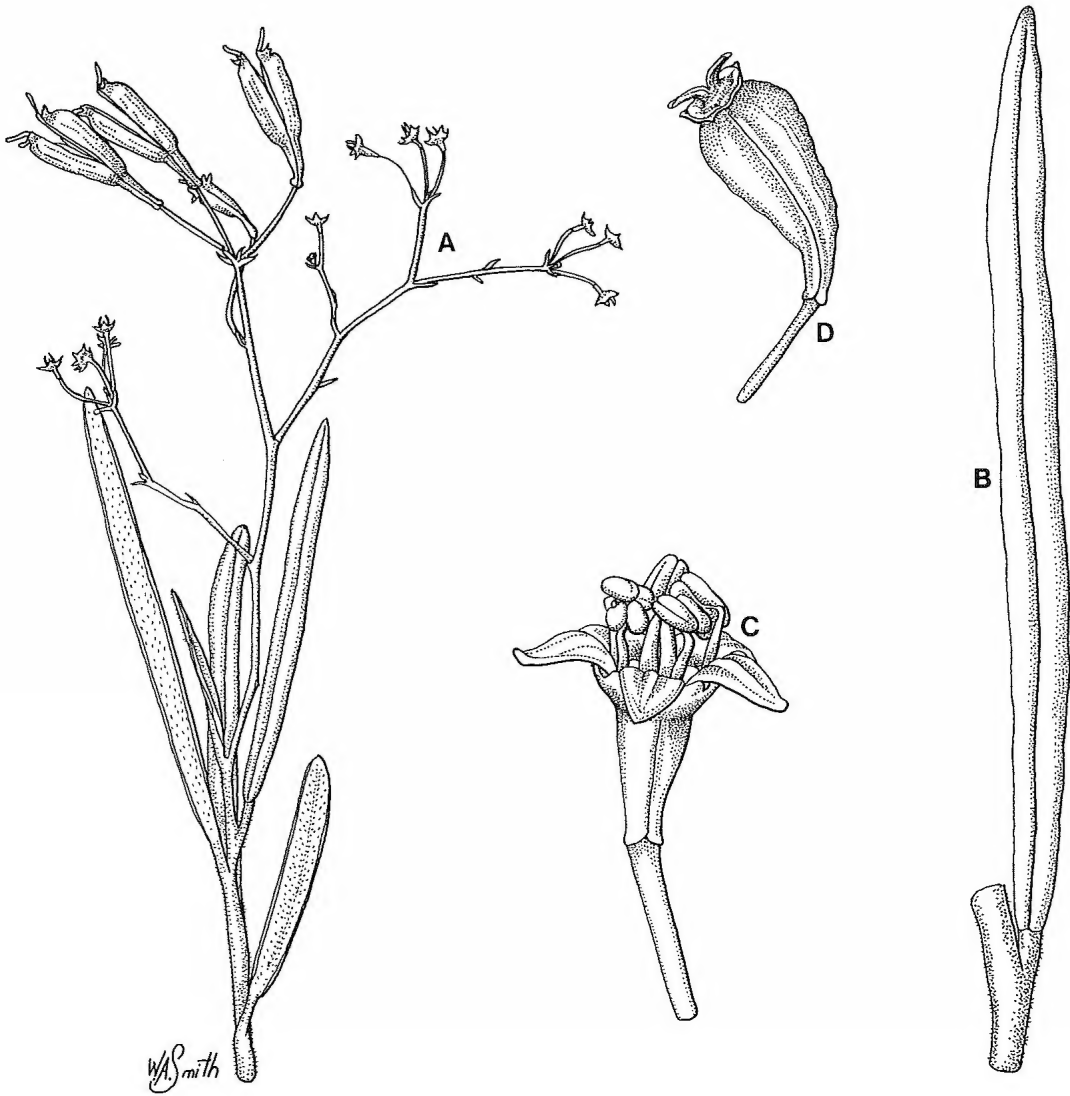


Fig. 1. *Astrotricha pauciflora*. A. fruiting branchlet $\times 2$. B. adaxial surface of leaf $\times 4$. C. flower $\times 8$. D. fruit $\times 4$. All from Bean 7734.

The northernmost record of it is from Lake Elphinstone near Nebo, and its southern limit is in the Mundubbera and Chinchilla areas. All occurrences are 100–400 kilometres from the coast, where the annual rainfall is less than 800 mm.

Conservation Status: *A. pauciflora* is a rare plant but it is totally confined to Mount Barney National Park. There are no apparent threats to its continued survival. Therefore, a conservation coding of 2RC is recommended, according to the criteria of Briggs & Leigh (1988).

The recommended conservation status as defined by the Queensland Nature Conservation Act is rare.

Etymology: The specific epithet refers to the few-flowered inflorescences of this species, compared to those of its nearest relative *A. biddulphiana*.

Astrotricha roddii Makinson, *Teloepa* 4(2): 313–6 (1991). **Type:** New South Wales. NORTH WESTERN SLOPES. Macintyre Falls, 3 km S of junction of Macintyre and Severn Rivers, 23 November 1984, A.N. Rodd 4096 (holo: NSW; iso: BRI, MEL).

Additional specimens examined: Queensland. DARLING DOWNS DISTRICT: western end of Mt Bullaganang, c. 40 km NE of Texas, Oct 1994, Bean 7987 (BRI, CANB); 'Atholbar' station, Mt Bullaganang, Nov 1994, Sparshott KMS 494 & Grimshaw (BRI, CANB, MEL, NSW).

Note: These specimens provide the first definite record of *Astrotricha roddii* in Queensland. *A. roddii* was described by Makinson (1991) and was considered at that time to be endemic to New South Wales, though the author did cite a specimen collected last century by Lau (MEL 119649), which could have originated from Queensland. It was previously known from four small populations in northern New South Wales (J. Benson, pers. comm.). The Queensland population occurs on a granitic mountain where it grows on skeletal soil in association with *Eucalyptus dealbata* Schauer, *Leptospermum brevipes* F. Muell. and *Callitris glaucophylla* J. Thoms. & L.A.S. Johnson. Individual plants are scattered but this population comprises at least 100 plants.

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